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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/686,416

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David T. Fulton

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AT&T Legal Department - MB

Attn: Patent Docketing

Room 2A-207

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EXAMINER

MANSFIELD, THOMAS L

ART UNIT

PAPER NUMBER

3624

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/686,416	<b>Applicant(s)</b> FULTON ET AL.	
	<b>Examiner</b> THOMAS MANSFIELD	<b>Art Unit</b> 3624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 February 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Response to Amendments***

1. This Continued Examination Office Action is in reply to the Request for Continued Examination filed on 10 December 2008.
2. No claims have been amended.
3. Claims 1-30 are currently pending and have been examined.

***Continued Examination Under 37 CFR 1.114***

4. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10 December 2008 has been entered.

**Response to Amendment**

***Response to Arguments***

5. Applicant's arguments filed 7 November 2008 have been fully considered but they are moot in view of new grounds of rejection.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 2, 5-12, 15-19, and 22-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Collins et al. (Collins) (U.S. 5,623,404) in view of Patton et al. (Patton), "Service Management: Principles and Practices", Instrument Society of America, 3<sup>rd</sup> edition, 1994.

With regard to Claims 1, 11, 18, 25, 29, and 30, Collins teaches *a computer-based method, system and computer-product (A/S system 12) of evaluating (evaluates) performance (portion of an objective function) of a service technician (service technician) who performs multiple service dispatches (service calls) (see at least column 5, lines 4-47), comprising:*

- *decomposing a service dispatch (service call) into a series of tasks (service activity associated with each of the calls) (see at least column 5, lines 35-46).*
- *determining planned times (assigns a start time) for tasks in the series (see at least column 5, lines 48-59).*

Collins does not specifically teaches *comparing, in a computer system, a service technician's actual times to perform the series of tasks to the planned times for the series of tasks*. Patton teaches *comparing, in a computer system* (computerized service management system), *a service technician's actual times to perform the series of tasks* (average time required to satisfactorily complete the service activity) *to the planned times* (compared to the planned time) *for the series of tasks* in analogous art of service management for the purposes of, "Performance measurements, Problem-solving efficiency" (see at least page 45, Table 3-2 and page 245).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the service management method as taught by Patton with the scheduling resource requests method of Collins. One of ordinary skill in the art would have been motivated to do so for the benefit of reporting performance measurement as problem-solving efficiency (Patton, page 44, under heading Performance Measurement and Reporting and Table 3-2).

Collins does not specifically teach *generating, in the computer system an evaluation of the service technician's performance efficiency based on the comparing*. Patton teaches *generating, in the computer system an evaluation of the service technician's performance efficiency* (Performance measurements, Problem-solving efficiency) *based on the comparing* in analogous art of service management for the purposes of, "Problem-solving efficiency" (see at least page 45, Table 3-2 and page 245).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the service management method as taught by Patton with the scheduling resource requests method of Collins. One of ordinary skill in the art would have been motivated to do so for the benefit of measuring the performance of a service technician as the average time to complete a service activity compared to the planned time (Collins, column 6, lines 29-36).

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With regards to Claims 2, 12, and 19, Collins does not specifically teach *wherein the service dispatch is performed at a customer premises and wherein at least some of the tasks comprise driving to the customer premises and driving from the customer premises*. Patton teaches *wherein the service dispatch is performed at a customer premises* (site, location) *and wherein at least some of the tasks comprise driving to the customer premises and driving from the customer premises* (actual on-site work time and travel time to and from the site) in analogous art of service management for the purposes of, “performance measure of productive time is the ratio of actual time supporting customers” (see at least pages 48-49 under heading, PRODUCTIVE TIME).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the service management method as taught by Patton with the scheduling resource requests method of Collins. One of ordinary skill in the art would have been motivated to do so for the benefit of noting that travel time is wasteful and that telephone guidance for remote diagnosis could reduce the need for a second trip to the customer site (Patton, pages 48-49 under heading, PRODUCTIVE TIME).

With regard to Claims 5, 15, and 22, Collins teaches *wherein the determining planned times for tasks in the series comprises determining planned times based on whether the tasks are being performed in a rural, suburban or urban location* (postal zip code centroid information) (see at least column 6, lines 5-7).

With regard to Claims 6, 16, and 23, Collins teaches *wherein the decomposing a service dispatch into a series of tasks comprises decomposing a service dispatch into a series of daily, job-based fixed and job-based variable tasks* (expected and pessimistic durations, fixed duration, variability information) (see at least column 7, lines 22-67).

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With regard to Claims 7 and 26, Collins does not specifically teach *wherein the generating an evaluation comprises generating a comparison of total actual time worked in a day, compared to total planned time for the day, based on service dispatches for the day*. Patton teaches *wherein the generating an evaluation (Cost Measures) comprises generating a comparison of total actual time (Actual \$, Time, Events) worked in a day (Time), compared to total planned time Estimated) for the day (Estimated \$, Time, Events), based on service dispatches for the day* in analogous art of service management for the purposes of, "Actual versus Estimated" (see at least pages 46, under heading, Cost Measures).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the service management method as taught by Patton with the scheduling resource requests method of Collins. One of ordinary skill in the art would have been motivated to do so for the benefit of comparing cost measures by actual versus estimated cost with the time and events (Patton, page 46).

With regard to Claims 8 and 27, Collins does not specifically teach *generating, in the computer system, a comparison of total number of demand service dispatches completed in a day, compared to total number of demand service dispatches for the day*. Patton teaches *generating, in the computer system, a comparison of total number of demand (Emergency) service dispatches (Repair Work Number, Time, Costs) completed in a day (Time), compared to total number of demand (Planned) service dispatches (Total Work Number, Time, Costs) in* analogous art of service management for the purposes of, "Emergency versus Planned Calls and Time" (see at least page 48, under heading Human Measures).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the service management method as taught by Patton with the scheduling resource requests method of Collins. One of ordinary skill in the art would have been motivated to do so for the benefit of comparing the emergency repair work, time and costs to the planned, total work, time and costs (Patton, page 48, under heading Human Measures).

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With regard to Claims 9 and 28, Collins does not specifically teach *generating, in the computer system, an evaluation of the service technician's revision rate based upon a number of service dispatches that are not completed successfully on a first visit*. Patton teaches *generating, in the computer system, an evaluation of the service technician's revision rate (Callback Rate) based upon a number of service dispatches that are not completed successfully (Number of Incidents) on a first visit (original service visit)* in analogous art of service management for the purposes of, "The callback measure evaluates the problem-solving efficiency of the service organization" (see at least page 48, under heading Human Measures and page 50, under heading CALLBACKS).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the service management method as taught by Patton with the scheduling resource requests method of Collins. One of ordinary skill in the art would have been motivated to do so for the benefit of identifying inadequate service performed (Patton, page 50, under heading CALLBACKS).

With regard to Claim 10, Collins teaches:

- *comparing the service technician's actual times (time segments) to perform the series of tasks in a given day (entire day) to the planned times for the series of tasks* (see at least column 16, lines 15-30 and Figure 2).
- *wherein the generating comprises generating an evaluation of the service technician's performance (useful for managing and predicting technician performance) for the given day based upon the comparing* (see at least column 6, lines 58-65).



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Collins does not specifically teach *providing the evaluation to a supervisor of the service technician at a beginning of a business day that immediately follows the given day*. Patton teaches *providing the evaluation* (administrative report, equipment history log) *to a supervisor (service management) of the service technician at a beginning of a business day that immediately follows the given day* (after completing the preventative maintenance procedures) in analogous art of service management for the purposes of, “the service technician prepares the administrative report required by service management to complete the preventative maintenance call” (see at least pages 200-201, under heading, Scheduled Maintenance).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the service management method as taught by Patton with the scheduling resource requests method of Collins. One of ordinary skill in the art would have been motivated to do so for the benefit of determining the next preventative service call (Patton, pages 200-201, under heading, Scheduled Maintenance).

With regard to Claims 17 and 24, Collins does not specifically teach *wherein the comparing is performed daily based on the service technician's actual times to perform series of tasks for a previous business day*. Patton teaches wherein the comparing is performed daily based on the service technician's actual times to perform series of tasks for a previous business day (Demand Total Work Hours, Supply Work Hours per Day) in analogous art of service management for the purposes of, “Backlog Days” (see at least page 48, under heading, Human Measures).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the service management method as taught by Patton with the scheduling resource requests method of Collins. One of ordinary skill in the art would have been motivated to do so for the benefit of calculating for work backlog (Patton, page 48, under heading, Human Measures).

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8. Claims 3, 4, 13, 14, 20, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Collins and Patton as applied to Claims 1, 2, 5-12, 15-19, and 22-30 above, and in further view of Kmack et al. (Kmack) (U.S. 6,304,851).

With regard to Claims 3, 13, and 20, Collins in view of Patton teach the method and system of Claims 1, 2, 5-12, 15-19, and 22-30 above. However, Collins and Patton do not specifically teach *wherein actual times for driving to the customer premises and driving from the customer premises are determined based on data that is generated from a vehicle that is driven by the service technician*. Kmack teaches *wherein actual times for driving to the customer premises and driving from the customer premises are determined based on data that is generated from a vehicle (global positioning systems) that is driven by the service technician in analogous art of mobile data collection for the purposes of, "record data and information associated with activities performed by a worker 20 utilizing the portable computing device 10"* (see at least column 8, lines 11-39).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the mobile data collection method as taught by Kmack with the scheduling resource requests method of Collins and the service management method as taught by Patton. One of ordinary skill in the art would have been motivated to do so for the benefit of having a device that can perform multiple data recording features associated with a time and motion study for accurate analysis or audit purposes (Kmack, column 8, lines 11-39).

With regard to Claims 4, 14, and 21, Collins and Patton do not specifically teach *wherein the service technician begins daily dispatches from a service center and ends daily dispatches at the service center and wherein at least some of the tasks comprise performing beginning of day tasks at the service center and performing end of day tasks at the service center*. Kmack teaches *wherein the service technician begins daily dispatches from a service center* (Morning Preparation, Stocking) (see at least column 15, line 45 through column 16, line 9 and FIG.'s 14

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and 15) *and ends daily* (end day) (see at least column 16, lines 35-59) *dispatches at the service center and wherein at least some of the tasks comprise performing beginning of day tasks* (first activity, Morning Preparation) (see at least FIG. 14) *at the service center and performing end of day tasks at the service center* (Communicate w/Manager, Aside Trash) (see at least FIG. 17) in analogous art of mobile data collection for the purposes of, "The time and motion study reports may subsequently be used to identify a change in the work process of the beverage industry operation to improve how they service POP outlets" (see at least column 18, lines 10-14).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the mobile data collection method as taught by Kmack with the scheduling resource requests method of Collins and the service management method as taught by Patton. One of ordinary skill in the art would have been motivated to do so for the benefit of differentiating non-driving related tasks and associated times from actual outlet delivery related tasks and associated times for specific activity identification (Kmack, see FIG's. 14, 15, 17 and column 15, line 61 through column 16, line 67).

### ***Conclusion***

9. The following prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- Collins et al (U.S. 5,623,404) discloses a system and method for producing schedules for resource requests having uncertain durations.
- Bogart (U.S. 6,173,053) discloses optimizing call-center process by using predictive data to distribute calls among agents.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THOMAS MANSFIELD whose telephone number is (571)270-1904. The examiner can normally be reached on Monday-Thursday 8:30 am-6 pm, alt. Fridays.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bradley Bayat can be reached on 571-272-6704. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. M./  
Examiner, Art Unit 3624

13 March 2009

Thomas Mansfield

/Bradley B Bayat/  
Supervisory Patent Examiner, Art Unit 3624